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# U.S. AGRICULTURE AND WORLD TRADE

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## S u m m a r y

**T**rade matters for U.S. farm income, commodity and food prices, and food variety. Export revenues account for more than one quarter of U.S. farm income.

Economic development, particularly in Asia, is a major factor driving the level and composition of U.S. agriculture and food exports. In response to the changing composition of global export demand, U.S. high-value product (HVP) exports surpassed U.S. bulk commodity exports in 1991.

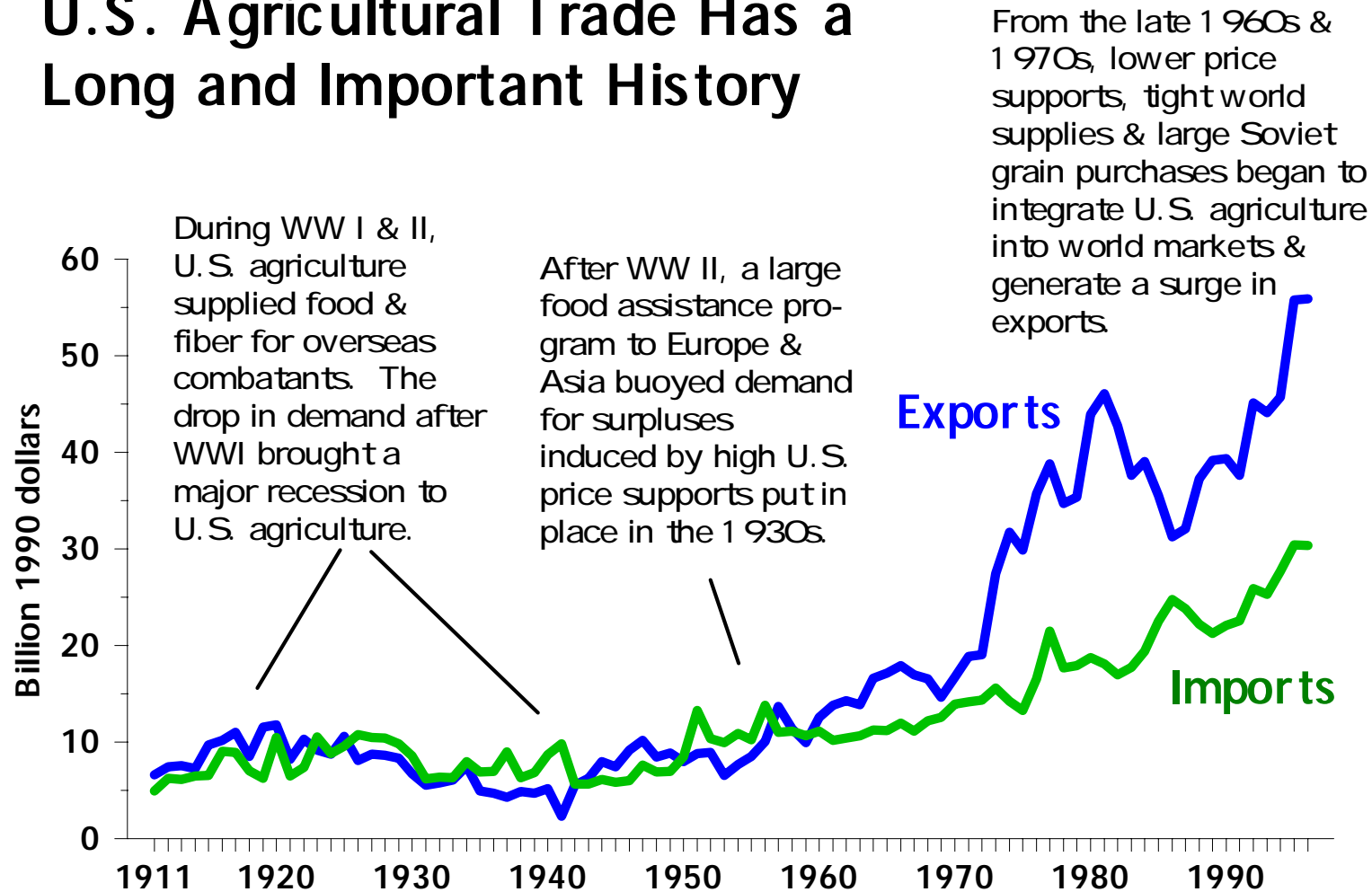
Multilateral and bilateral market-opening negotiations continue to be important. Sanitary and phytosanitary measures, other technical barriers to trade, and state trading are trade policy issues that concern U.S. agricultural exporters and policymakers.

Uncertainties that affect the future of U.S. agricultural and food trade include the future role of China in international markets, the changing structure of the European Union, the expansion of regional trade agree-

ments in Asia and Latin America, and the role of foreign direct investment versus exports as a means of expanding U.S. sales.

The U.S. trade policy agenda is changing in response to the changing composition of global agricultural and food product markets. Of increasing interest are: sanitary and phytosanitary issues; marketing and handling issues; overcoming infrastructural impediments faced by perishable products; market development policy; and investment policy.

# U.S. Agricultural Trade Has a Long and Important History

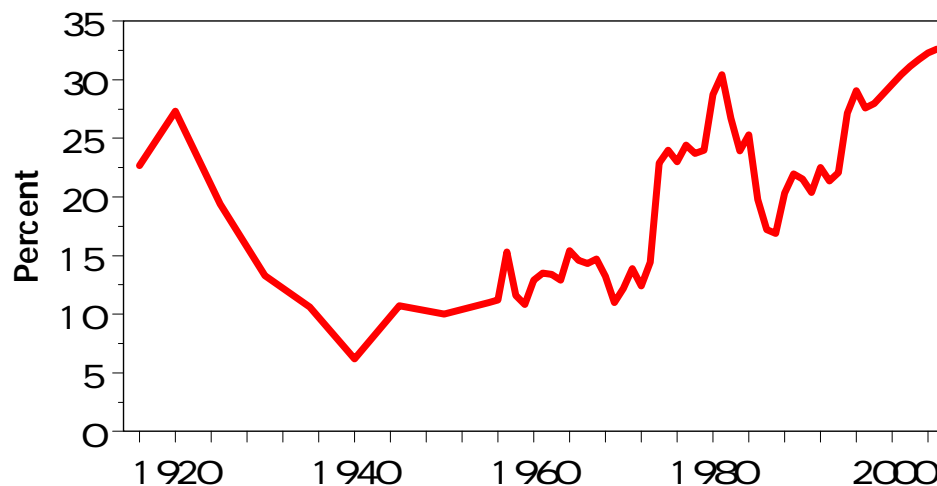


## U.S. Agricultural Exports

- U.S. agricultural exports declined in the 1980s, but policy initiatives--the completion of the Uruguay Round, the North American Free Trade Agreement (NAFTA), and changes in U.S. farm policy--have since combined with strong income growth in key regions to create a favorable environment for U.S. trade.
- Trade opportunities are of essential importance for U.S. agriculture. With the productivity of U.S. agriculture growing faster than domestic food and fiber demand, U.S. farmers and agricultural firms rely heavily on export markets to sustain prices and revenues.
- Recently agricultural exports have accounted for about 25 percent of gross cash receipts (not including farm program payments). For some commodities, 'trade dependency' is considerably higher. Over the last few decades, wheat exports have averaged 55 percent of total wheat disappearance. Shares of rice and cotton production going to export markets have averaged 40 percent or more in recent years.

## U.S. Agriculture Now Depends on Trade

*Trade share of gross cash receipts*



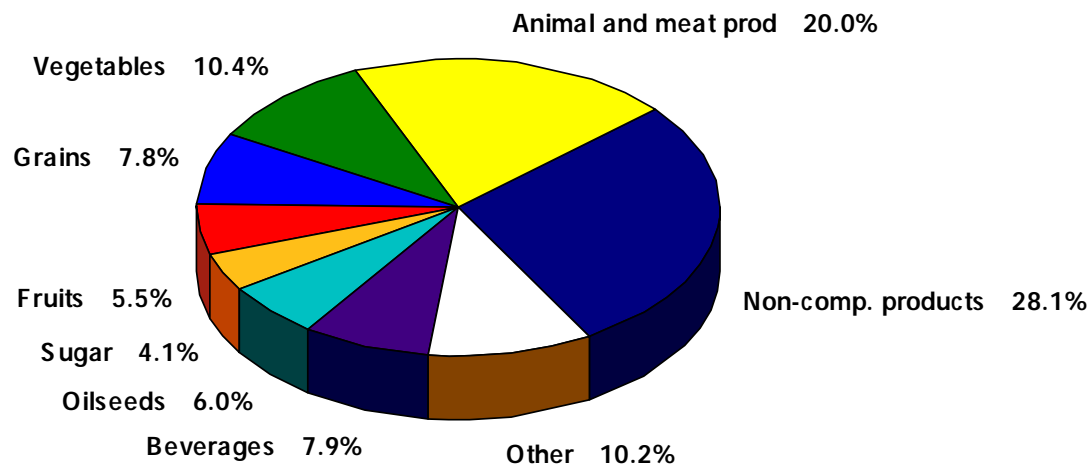
Note: Agricultural exports/Gross cash income less government payments

*For a graphical presentation of the market outlook for U.S. agricultural commodities:*

See the Agricultural Baseline projection briefing room on the ERS Home Page:  
<http://www.econ.ag.gov/>

# Consumers Also Benefit From Trade

*Agricultural imports totaled \$29.9 billion in 1995*



Source: U.S. Agricultural Trade Update, March 1996

- Imports expand food variety, stabilize year-round supply of fresh fruits and vegetables, and temper increases in food prices. Almost one-third of total agricultural and food imports are “non-competitive” imports. These are foods not produced in most of the United States, like coffee, chocolate, and tropical fruit. Other food imports reflect consumer preferences for foods differentiated by origin and quality, like French wine and

## U.S. Consumers and Agricultural Trade

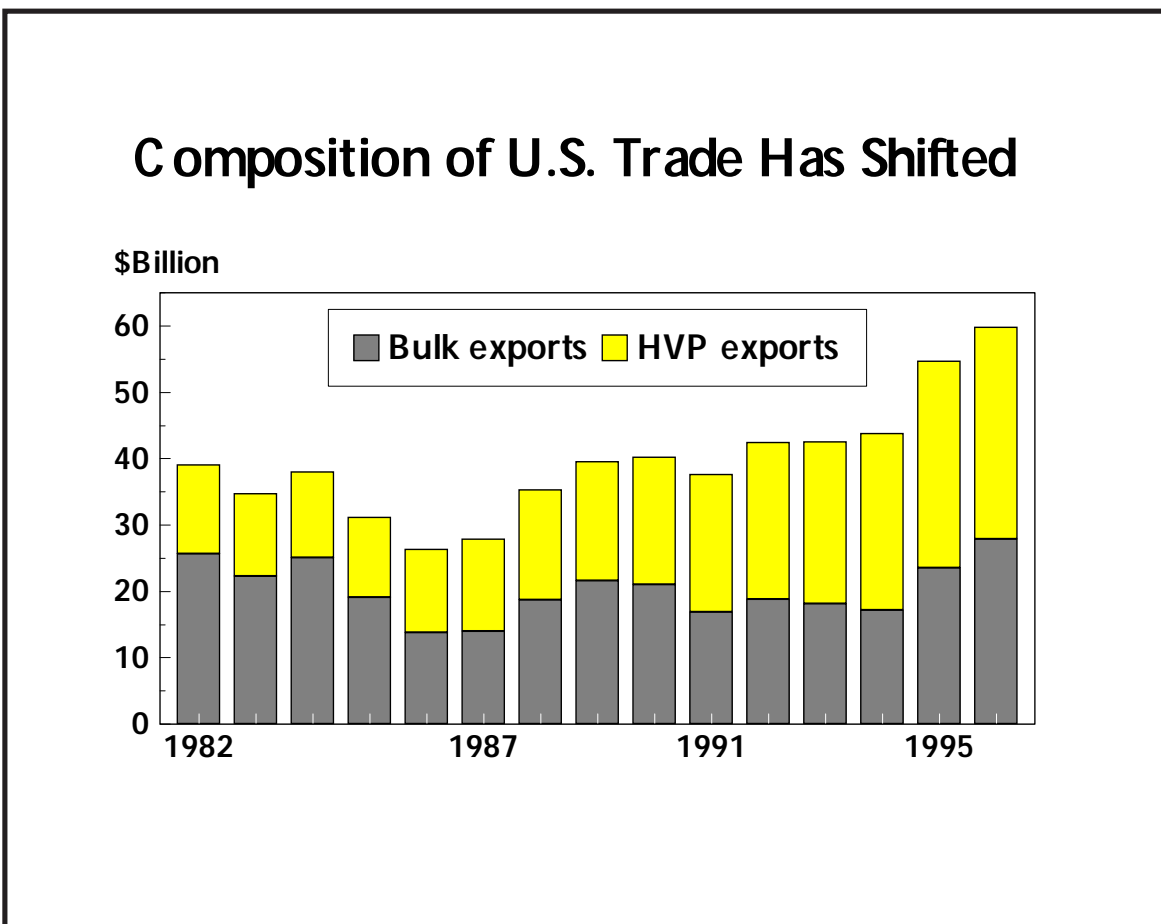
- Trade is also important to U.S. consumers. The real (inflation-ad-

justed) value of U.S. agricultural imports has been relatively stable in recent years, and imports have accounted for about 8 percent of total food consumed in American homes.

cheese or Italian pasta, and for “off season” fresh fruits and vegetables from Mexico, Chile, and other tropical countries.

## U.S. Exports of HVPs Outpace Bulk Commodities

- The value of U.S. agricultural exports was \$60.4 billion in 1996, up from \$56.3 billion in 1995.
- Historically, bulk commodities (grains and oilseeds) accounted for the majority of U.S. agricultural exports. In the last decade, that picture changed. In 1991, high-value products (HVPs)--a category composed of processed foods, intermediate products such as soybean meals and oils, and consumer-ready unprocessed products such as fresh fruits and vegetables and eggs--surpassed bulk goods in export value.
- Export growth in HVPs is in response to growing demand in North America and East Asia where personal incomes are increasing, diets are diversifying, and (in the case of East Asian markets) production capacity (for livestock operations, for example) is very constrained. Although HVP exports are increasing, they tend to be concentrated in relatively few, more affluent markets. For example, major markets for processed food exports (\$15.5 billion in 1995) are Japan, Mexico, and S. Korea. Intermediate product exports (\$8.6 billion in 1995)



went mostly to the European Union and Japan; and consumer-ready unprocessed food exports (\$4.6 billion in 1995) went mostly to Canada, Japan, the European Union, S. Korea, and Hong Kong.

- USDA trade forecasts show some slowing in HVP export growth likely, in

*For more information from ERS on U.S. commodity production, use, and trade, see:*

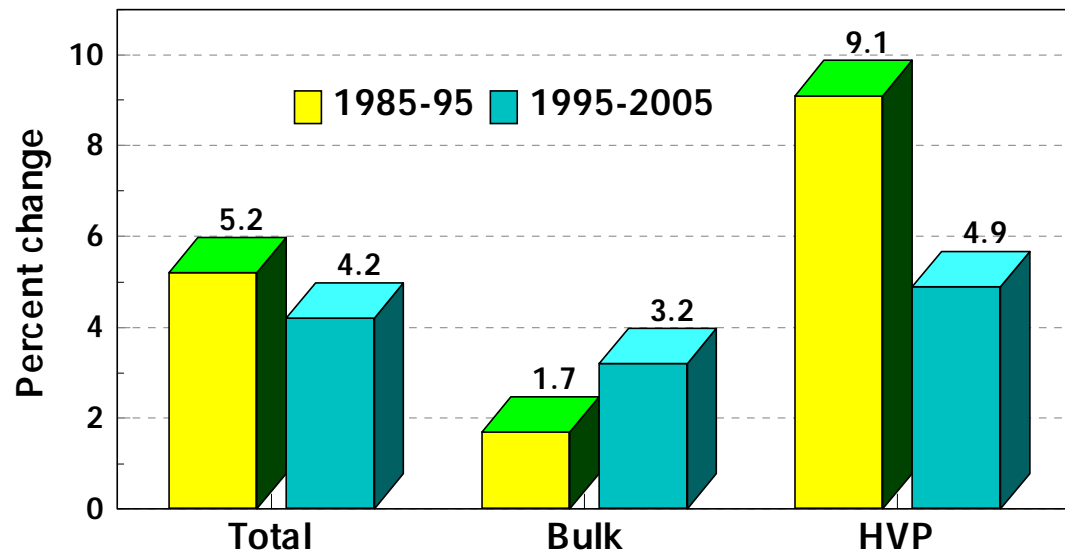
*Commodity Situation and Outlook Series*

which can be accessed through the ERS Home Page:

<http://www.econ.ag.gov/>

## Projected Export Growth Rates Favor HVPs

*Though it will slow slightly over next decade, the growth rate of HVP exports will still exceed the rate for bulk products...*



part because potential gains in market access through bilateral negotiations in East Asian and North American markets cannot now be factored into the forecasts. Still, as personal incomes grow, the composition of trade will continue to shift toward high value products. HVP exports are expected to

increase about 6 percent a year between 1996 and 2005, while bulk commodity exports are expected to increase slightly more than 3 percent a year.

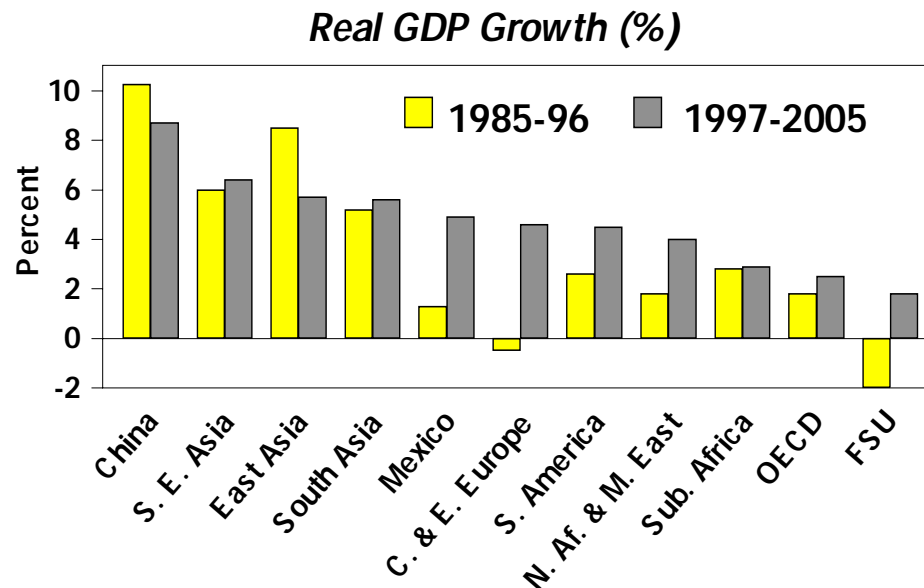
- The strong growth assumed for exports over the next decade is ex-

pected to cushion U.S. farmers' incomes as they adjust to a new policy environment created by the 1996 Federal Agricultural Improvement and Reform Act (the 1996 Act).

## The Future of U.S. Agricultural Trade

- Global income and population growth are the underlying causes of new and expanding market opportunities. But realizing those opportunities relies on continued gains in reducing existing trade barriers, which remain high in some markets, and on assuring that new forms of trade restrictions, including protectionism within the context of regional agreements, do not proliferate.
- Additionally, global commerce is much more complex than in the past. There is much still to learn about the relationships between the multinational locations of food firms and international trade in food and agricultural products.

## Asia and Other Developing Countries Lead in Forecasts of Economic Growth...



*For data from ERS on U.S. agricultural trade:*

*Foreign Agricultural Trade of the United States*

which can be accessed through the ERS Home Page:  
<http://www.econ.ag.gov/>

### Expanding Markets in Asia

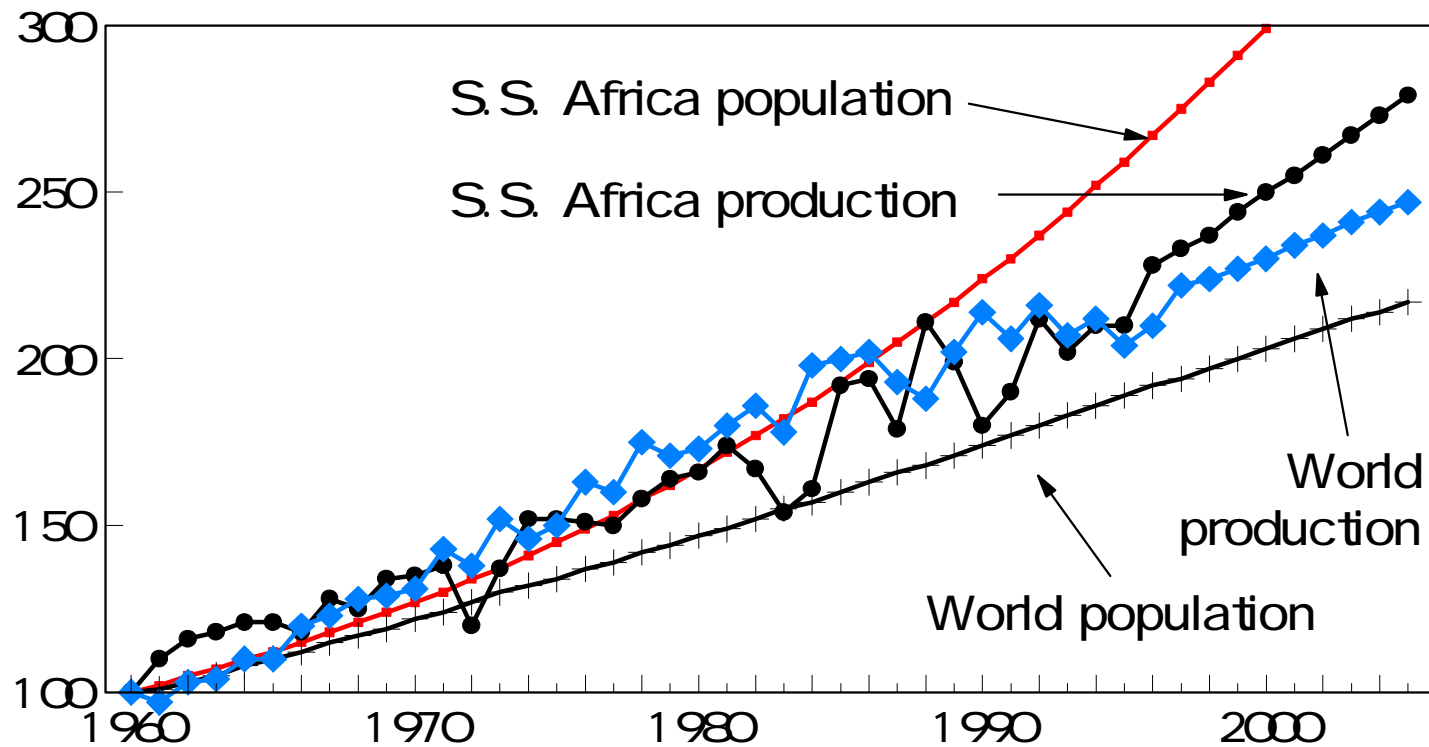
- USDA and other forecasters project strong economic growth throughout much of Asia to continue through the coming decade. Combined with the limited capacity of most Asian countries to expand agricultural production, income growth is likely to translate into increased demand for

U.S. as well as other nations' exports.

- The rate of economic growth is expected to improve in most other regions of the world as well, though not at the rates anticipated for Asia.

# In Sub-Saharan Africa Population Growth Is Outpacing Gains in Food Production

Index: 1960=100



Source: ERS/USDA baseline analysis



### *Population Expansion Fuels World Demand and Food Aid Needs*

- World population is projected to grow 1.5 percent annually until 2005, sustaining global demand for bulk commodities and food products. However, because global grain production is expected to increase even faster, real commodity prices are expected to continue their long-run downward trend.
- Population is growing most rapidly in the lowest income countries, such as those of Sub-Saharan Africa, where agricultural productivity gains are lagging population growth. USDA forecasts that the gap between population growth and food production growth in Sub-Saharan Africa will expand food aid needs rather than commercial exports. This is because of the continuing slow rates of economic development and low levels of personal income.

### *Suggested reading:*

*Food Aid Needs Assessment: Situation and Outlook Series*, USDA, Economic Research Service, November 1996.

## The Uruguay Round Produced Results

- The Uruguay Round of the General Agreement on Tariffs and Trade established rules and commitments for agricultural trade
- "Disciplines" were established for:
  - *Market access*
    - all non-tariff barriers were converted to tariff equivalents
    - all tariffs must be reduced by 36 percent on average
    - guarantees of minimum market access were granted
  - *Domestic support*
  - *Export subsidies*
    - volume must be reduced by 21 percent, value by 36 percent
    - commodity coverage was fixed

### *The Uruguay Round Produced Results*

- Both the Uruguay Round agreements and NAFTA are vitally important to U.S. agriculture. The Uruguay Round was especially key in establishing frameworks for ongoing efforts to lower trade barriers and expand market access worldwide.

- Although the near-term quantitative effects may be modest, the Uruguay Round's conversion of nontariff barriers to tariffs is a major accomplishment with the potential to bring greater transparency to agricultural trade policies and facilitate future reductions of import barriers.

## High Tariffs Remain in Many Markets, Particularly for High-Value Products (HVPs)

### *Selected bound tariff rates in 2000*

Japan		Korea		EU		Canada	
Beef	38%	Beef	41%	Beef	152%	Wheat	76%
Cheese	30%	Cig.	40%	Rice	185%	Butter	299%
O. Juice	26%			Wheat	102%	Chicken	238%
				Butter	218%		

### *Some Problems Were Left Unsolved By the Uruguay Round...*

- Some countries pursued “dirty tariffication.” This means that new, bound tariff rates were much higher than pre-Round levels of protection implied by nontariff barriers. Additionally, agricultural tariffs remain generally much higher than tariffs in other sectors of the economy. This is true for the United States and many other nations.

- In the European Union, for example, tariff bindings were higher than 1994 protection levels in six of the seven major agricultural product groups. Tariff offers for wheat exceeded historical tariff equivalents in India (by 98 percent), Pakistan (by 171 percent), and Morocco (by 21 percent).

- Additionally, although cuts in export subsidies were meaningful, agriculture is the only sector in which export subsidies remain permissible. Some other forms of export assistance, such as export credits and credit guarantees, food aid assistance, and market promotion programs, could potentially become the source of trade friction.

- Trade-distorting domestic support, such as market price support, is also reduced by the Round. But farm-sector support considered non- or minimally trade distorting, such as publicly funded agricultural research, extension, inspection, infrastructure, and food security stocks, as well as crop insurance and decoupled income payments, need not be re-

duced.

- Disciplines on export subsidies, which have been used most heavily by the European Union and the United States, were a major accomplishment of the Round.

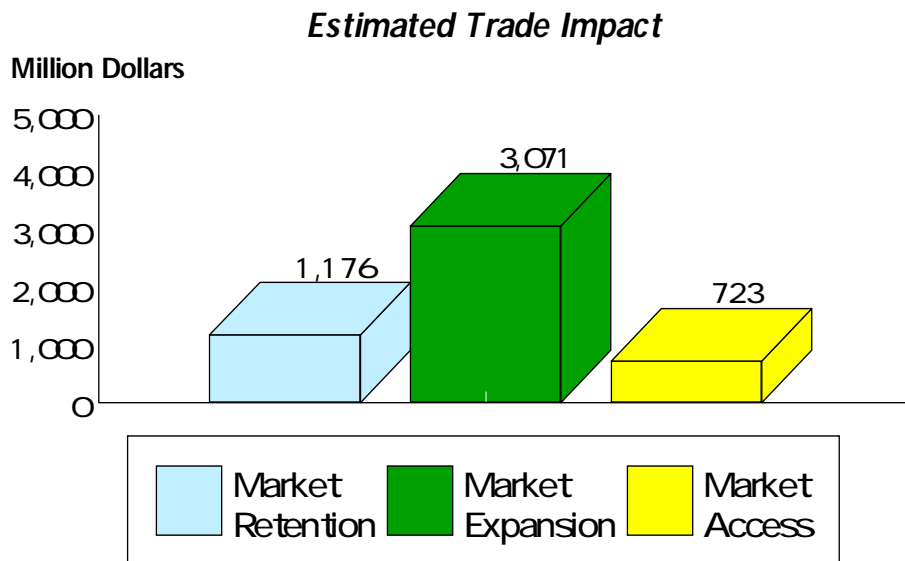
- The UR did little to address issues associated with the use of state trading (single-desk buying and selling agents) in agriculture. There is concern that some state traders use selective price cutting schemes, are unfairly subsidized by governments, or may exercise monopsonist power.

*... And Other Trade Policy Issues are Emerging*

- The Uruguay Round Agreement on Sanitary and Phytosanitary Measures allows nations to use border measures to protect human, animal, or plant life or health; however, the use of these measures must be justified by objective scientific evidence. The Standards Code covers technical regulations on general food labeling, nutrition, and packaging. These regulations cannot be applied as a disguised restriction on international trade. There is concern, however, that as traditional trade barriers are lowered, sanitary and phytosanitary measures and technical regulations will be used as protection devices.

- A 1996 survey of USDA's Foreign Agricultural Service posts estimated that \$5.5 billion of U.S. agricultural exports are affected by "debatable" sanitary, phytosanitary, and other

## Technical Barriers Threaten, Constrain, and Block U.S. Agricultural Exports



technical barriers to trade. This includes \$1.8 billion of "threatened" trade, \$2.9 billion of "constrained" trade, and \$695 million of prohibited trade. Compared to \$60.4 billion of total U.S. agricultural exports in 1996, these impediments do not presently represent a serious hindrance.

### *Suggested reading:*

Krissoff, Barry, Nicole Ballenger, John Dunmore, and Denice Gray. *Exploring Linkages Among Agriculture, Trade, and the Environment: Issues for the Next Century*, Agricultural Economic Report 738, USDA, Economic Research Service, May 1996.

## Western Hemisphere Markets Account for a Quarter of Total U.S. Exports

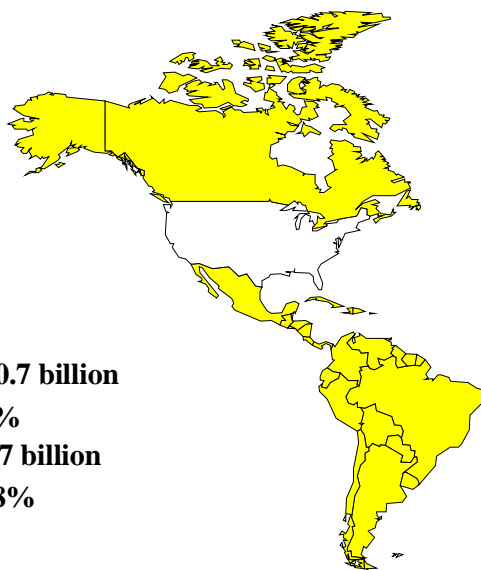
### Issues:

- ▶ Improved 1995-2005 growth prospects
- ▶ Subregional pacts impede U.S. access

### Focus on Latin America ...

- ▶ Agricultural imports: \$ 10.7 billion
- ▶ Share of world: 3.3%
- ▶ Imports from U.S.: \$ 2.7 billion
- ▶ U.S. market share: 24.8%

(1991-93 averages)



## Regional Pacts and Trade in Agriculture

### North and South America

- The numerous subregional pacts of the Americas include NAFTA, the Group of Three (Mexico, Venezuela, and Columbia), CARICOM, MERCOSUR (Brazil, Paraguay, Uruguay, and Argentina), the Andean Group, the Central American Common Market, a number of bilateral agreements between Chile and other countries, and the Association of Caribbean States.

- There is some concern that movement toward subregional pacts may have adversely affected U.S. trade. MERCOSUR, for example, may have reduced U.S. exports to Brazil in the 1990s because MERCOSUR tariffs on Argentine goods are lower than tariffs on U.S. goods. Future agreements could form between NAFTA and Chile, NAFTA and MERCOSUR, MERCOSUR and the Andean Pact, and others.

- Subregional pacts can create trade over the longer run if they stimulate economic growth, so the net effect of subregional pacts in the Western Hemisphere remains an em-

- Plant health regulations appear to be the most important technical barrier to U.S. agricultural exports, followed by food safety standards, and quality standards. Labeling requirements are also important.

- Processed food exports are most likely to be constrained by “debatable” technical barriers to trade,

followed by horticultural products, then livestock and meat products. Technical barriers are most pervasive in East Asia, with an estimated \$2.3 billion of U.S. trade expansion potential affected.

pirical question and an area for research.

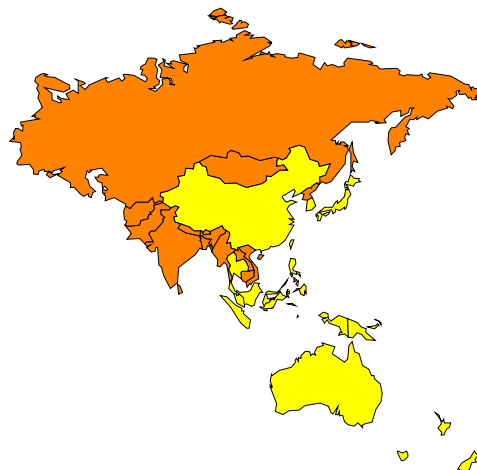
### Asia

- The Asia-Pacific Economic Cooperation (APEC) forum of 18 members bought \$33 billion of U.S. exports in 1995. Seven markets (Japan, Canada, Mexico, South Korea, China, Taiwan, and Hong Kong) accounted for 90 percent of these sales. Expanding middle class populations, lowered trade barriers, and the weak dollar favored U.S. trade exports to these countries.

- In Asia, Indonesia, Thailand, Malaysia, and the Philippines are rapidly expanding U.S. export markets (up 140 percent from 1990-1995) as is China. This is because of large and expanding populations, strong economic performance, and per capita income levels at which per capita food consumption is still growing.

- Rising incomes, land scarcity, increased market access, and the westernization of diets have benefited U.S. exports to Japan, South Korea, Taiwan, and Hong Kong, particularly of consumer-ready and processed food products.

## Nations of the Asia-Pacific Economic Cooperation Forum (APEC) Accounted for More Than 60 Percent of U.S. Exports in 1995



### Issues:

- ▶ The fastest growing region of the world
- ▶ Includes a number of large emerging markets

### Focus on Asian members of APEC...

Total imports:	\$81.0 billion
Share of world:	26.4%
Imports from U.S.:	\$16.5 billion
U.S. market share:	20.4%

(1991-93 averages)

*For U.S. trade with Asia and the Western Hemisphere, see the Situation and Outlook Series on:*

*APEC Agriculture and Trade  
NAFTA Agriculture and Trade*

on the ERS Home Page:  
<http://www.econ.ag.gov/>

### Suggested reading:

Wang, Zhi. *The Impact of China and Taiwan Joining the World Trade Organization on U.S. and World Agricultural Trade: A Computable General Equilibrium Analysis*, Technical Bulletin 1858, USDA, Economic Research Service, May 1997.

### *EU Enlargement and CAP Reform*

- While there is no firm timetable, Poland, Hungary, the Czech Republic and Slovakia could become members of the European Union as soon as 2000.
- Membership in the EU means that the EU will have preferential ac-

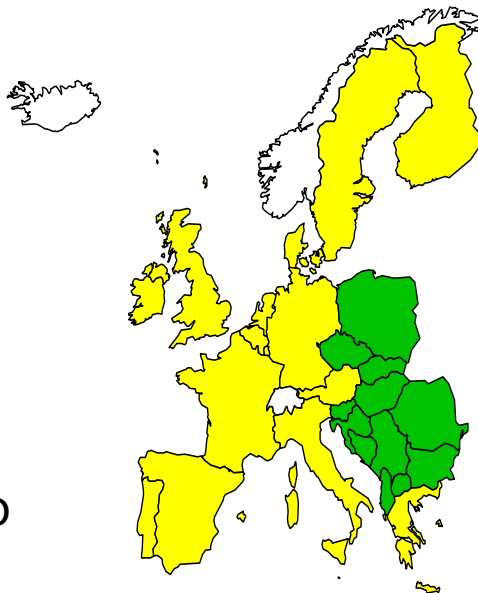
cess to the markets of the Central and Eastern European Countries (CEEs), and vice versa. It also means CEE trade barriers will rise vis-a-vis the U.S. and other non-EU countries, which could divert some U.S. trade.

- However, extending the EU's protective Common Agricultural Policy to the CEE countries, which have large

agricultural sectors in the midst of structural reform, could lead to prohibitive budgetary costs and exacerbate costly surpluses in some commodities. Thus, some speculate the EU could be forced to make changes in the CAP, such as further reducing support prices.

## **EU Enlargement Could Accelerate Reform of Common Agricultural Policy**

- EU-15 has entered into association agreements with Central and Eastern European states
- The U.S. sends \$9.3 billion in agricultural products to the EU
- U.S. agricultural exports to CEEs are in excess of \$400 million



*For more information from ERS on U.S. trade with Europe, the Newly Independent States, and the Baltics, see...*

*International Agriculture and Trade Report: Europe*

*International Agriculture and Trade Report: Newly Independent States and the Baltics*

Both can be accessed through the ERS Home Page:  
<http://www.econ.ag.gov/>

## Growth in Grain Demand from China

- The USDA forecasts that China's total grain imports will rise from about 17 million tons now to about 33 million tons in 2005, making it the largest grain importer in the region. This projection contrasts sharply with that of the WorldWatch Institute (WW) and is in line with others'.

- The ERS projections assume meat will continue to displace grain in the Chinese diet, grain production will expand but more slowly than consumption, and that higher grain yields are forthcoming.

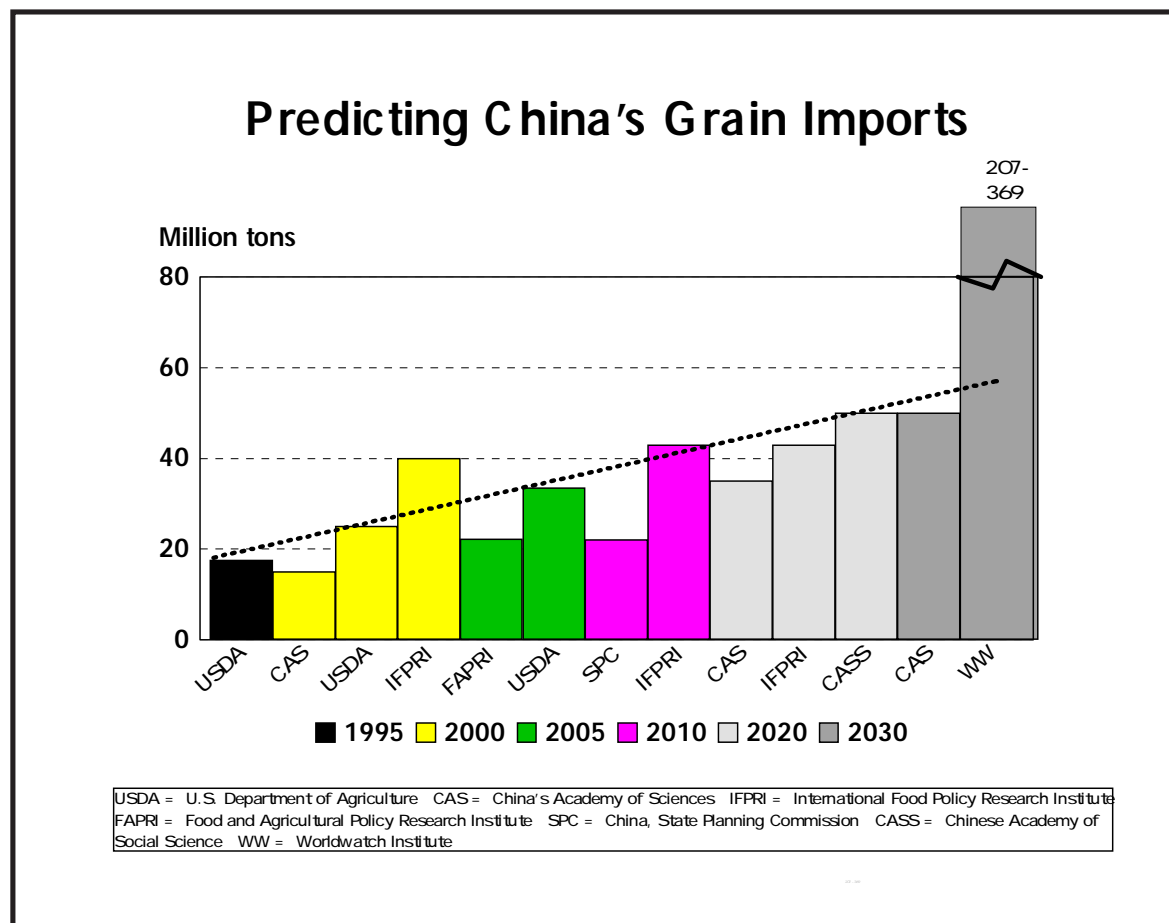
- Scope for higher yields exists because under-reporting of land means that yields have been overstated. Also, greater application of higher yielding seeds, better management, and increased use of other inputs are anticipated, as well as more multiple cropping.

- Uncertainties related to trade with China include its commitment to the world trading system, government policy regarding the importation of

"luxury" goods such as meats and feed grains, and the capacity of China's trade infrastructure such as port capacity and grain handling facilities.

## Suggested reading:

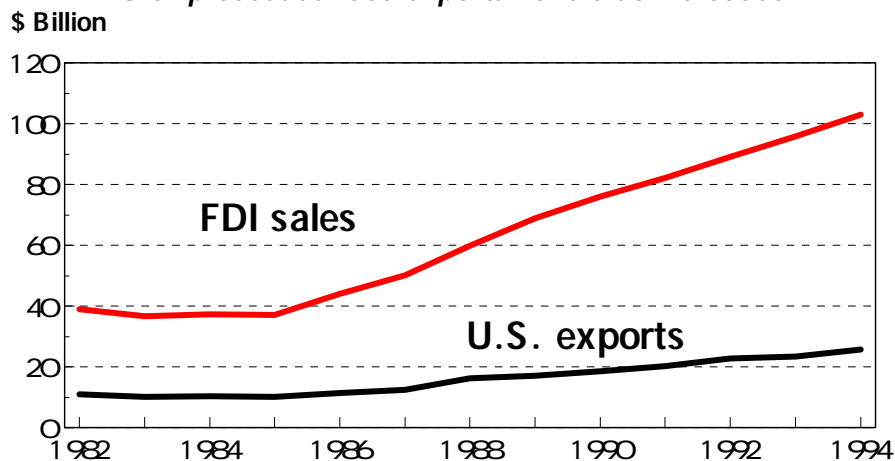
Crook, Fred and Hunter Colby. *The Future of China's Grain Market*, AIB-730, USDA, Economic Research Service, October 1996.





## FDI Sales of Processed Foods Exceed U.S. Exports of Processed Foods

*While FDI sales of U.S. food firms have tripled in the last decade, U.S. processed food exports have also increased*



back to the U.S. as imports. The remaining 19 percent was exported from the host country to third-country markets.

- FDI sales are four times greater than U.S. exports of processed foods, and growing rapidly. They nearly tripled in the last 10 years. There is growing interest in understanding location and sourcing decisions by multinational food firms, and the relationships between FDI sales by U.S. firms and exports of U.S. agricultural products: for example, are FDI sales substituting for exports of processed foods?

### *Suggested readings:*

Neff, Steve. "Globalization of the Processed Foods Market," Agricultural Economic Report 742, USDA, Economic Research Service, October 1996.

Ruppel, Fred. "U.S. Trade in Processed Foods," and Bolling, Christine, Charles Handy, and Steve Neff. "Foreign Affiliates of U.S. Food Firms," *Agricultural Outlook*, USDA, Economic Research Service, January/February 1997.

## Foreign Direct Investment

- Foreign direct investment (FDI) has become a key component of U.S. food manufacturing firms' strategies in the world market. FDI gives firms more control over production, quality, distribution, and marketing of their product. Six of the ten largest multinational food manufacturing or distribution firms are

U.S. in origin, as are 21 of the 50 largest. U.S. FDI abroad is twice as large as FDI investments in the United States.

- U.S. firms locate food processing plants in foreign countries primarily to sell in the host country market. Seventy-nine percent of total FDI sales of U.S. food firms in 1993 stayed in the host country. Only 2 percent made it